# Agricultural Air Quality 2 Years of Progress



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#### **Overview**

- Strategic Direction
- Air Quality Personnel
- Practice Standards
- Tool Development
- Effects
- Training
- Funding



### Progress in the past 2 years

- Air Quality and Atmospheric Change Technology Development Team
- Established 45 NRCS State Air Quality Contacts
- Emphasis on air quality and atmospheric change in programs (EQIP, CSP)

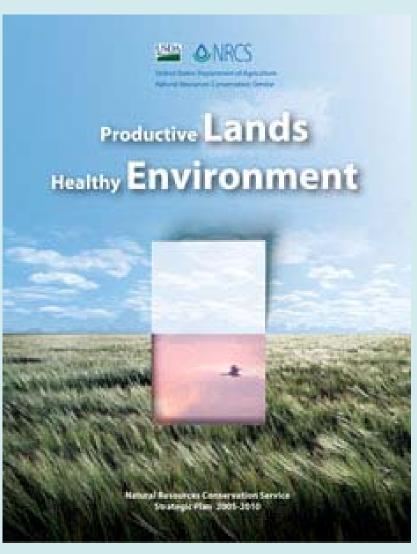


### Progress in the past 2 years

- Increased emphasis on air quality within the Department
- Strong working relationship with producers, conservation partners and regulatory agencies
- Engaged with EPA and others on the National Clean Diesel Campaign



### NRCS 5-year Strategic Plan



#### Foundation Goals:

- High-quality, Productive Soils
- Clean and Abundant Water
- Healthy Plant & Animal Communities

#### Venture Goals:

- Clean Air
- Adequate Energy Supply
- Working Farm & Ranch Lands



### Revising Air-related Resource Concerns and Practice Standards

- Particulate Matter
- Ozone Precursors
- Ammonia
- Odor
- Greenhouse Gases





### NRCS Air Quality Tools Now Under Development or Planned

- Standard NRCS Air Planning (SNAP) Tool
- Animal operations siting tool
- Various emission calculation tools (PM; Ozone precursors, etc.)
- COMET-VR Enhancements



### **Training**

- 2-3 Day Agricultural Air Quality Basics (Under development-rollout in 2007)
- Online Ag AQAC Modules (Under development-rollout in 2007)
  - Animal agricultural air quality issues
  - Air Quality 101
  - Greenhouse Gases and Carbon Sequestration



## Conservation Effects Assessment Project (CEAP) and Air Quality

#### Watershed-based estimates of:

- Carbon Sequestration
- Wind Erosion
- Pesticide Drift
- Nitrogen Volatilization

Preliminary estimates January 2007; some not complete until January 2008



### **Air Quality Funding**

- CSP: Rewarding and Incentivizing
  - 2004: 18 watersheds, 2,200 farmers(2 million acres)

Payments in FY04 = \$216,545 Payments in FY05 = \$357,929 (+65%)

 2005: 220 watersheds, 12,800 farmers (10.2 million acres)

Payments in FY05 = \$4,481,924

- 2006: 60 watersheds



#### CSP Air Quality-Related Enhancements

- Over \$18 million in contracts 2006
- Major Activities for Payment:
  - 1. No-till, strip-till, direct seeding
  - 2. Alternatives to burning
  - 3. Injecting animal waste
  - 4. COMET-VR usage
  - 5. Use of low volume sprayers & calibration
  - 6. Roadway dust abatement



### **CSP 2006 Enhancement EAM-40: Scenario Testing with COMET-VR**

- Eligible CSP land managers paid a onetime payment of \$500 for generating soil carbon storage scenarios with COMET-VR
- 899 contracts; \$449,500
- 18 states participating to date





## **Environmental Quality Incentives Program (EQIP)**

- \$444 million EQIP total in 2005; \$31 million Air Quality-related
- Largest expenditures by state in 2005:
  - California (\$5.90 million)
  - Arizona (\$3.37 million)
  - Michigan (\$2.69 million)
  - New Mexico (\$1.77 million)
  - Texas (\$1.64 million)
  - Washington (\$1.49 million)
  - New York (\$1.44 million)



## Conservation Innovation Grants (under EQIP)

- 66 funded in 2006
- 7 with full or partial air quality focus
- Total AQ dollars: \$3.28 million
- Examples:
  - Colorado State Univ.: Odor and Ammonia reduction BMP demo on feedlots and dairies
  - WA Wheat Growers: Undercutter demo and promotion for dust control in wheat/fallow region of PNW



### Engaged in Support of Voluntary Reporting of Greenhouse Gases (DOE 1605(b) Program)

- Enhancing NRCS' COMET-VR Tool
  - Updated soils and rotations, based on MLRA scale
  - Improved feedback and user response
  - Tool evaluations/questionnaires
  - Working with CSU on adding nitrous oxide and methane estimates





